Prevalence Estimates for Risk Factors and Health Indicators

State of Michigan

Selected Tables

Michigan Behavioral Risk Factor Survey

2018

Lifecourse Epidemiology and Genomics Division Bureau of Epidemiology and Population Health Michigan Department of Health and Human Services

Introduction	3
Table 1: General Health Status	4
Table 2: Health Status on at Least 14 Days in the Past Month	
Table 3: Mean Number of Days of Poor Physical Health, Poor Mental Health, and Activity Limitations	
Table 4: Disability	
Table 5: Weight Status	8
Table 6: Health Care Coverage	9
Table 7: Health Care Access	10
Risk Behaviors Tables	
Table 8: No Leisure Time Physical Activity	11
Table 9: Cigarette Smoking	12
Table 10: Current Smokers who Attempted to Quit	13
Table 11: E-Cigarettes	14
Table 12: Smokeless Tobacco	15
Table 13: Hookah Use	16
Table 14: Alcohol Consumption	17
Table 15: Mean Number of Binge Drinking Occasions During the Past Month Among Binge Drinkers	18
Table 16: Drove Motor Vehicle After Drinking	19
Table 17: Seatbelt Use	20
Clinical Preventative Practices	
Table 18: No Routine Checkup in Past Year	21
Table 19: Mammography Indicators Among Women Aged 40 Years and Older	22
Table 20: Cervical Cancer Screening Among Women Aged 18 Years and Older	23
Table 21: Prostate Cancer Screening Among Men Aged 50 Years and Older	24
Table 22: Colorectal Cancer Screening (Blood Stool Test) Among Adults 50 Years and Older	
Table 23: Colorectal Cancer Screening (Sigmoidoscopy/Colonoscopy) Among Adults 50 Years and Old	
Table 24: Appropriate Colorectal Cancer Screening Among Adults 50 Years and Older	
Table 25: Oral Health	
Table 26: Immunizations Among Adults Aged 65 Years and Older	
Table 27: HIV Testing Among Adults Aged 18-64 Years	30
Chronic Conditions	
Table 28: Asthma Among Adults	
Table 29: Asthma Among Children	
Table 30: Chronic Obstructive Pulmonary Disease (COPD)	
Table 31: Arthritis	
Table 32: Cardiovascular Disease	
Table 33: Cancer	
Table 34: Diabetes	
Table 35: Kidney Disease	
Table 36: Depression	
Table 37: Falls Among Adults Aged 45 Years and Older	40

Introduction

The Michigan Behavioral Risk Factor Survey (MiBRFS) is an annual, statewide telephone survey of Michigan adults aged 18 years and older that is conducted through a collaborative effort among the Population Health Surveillance Branch (PHSB) of the Centers for Disease Control and Prevention (CDC), the Michigan State University Institute for Public Policy and Social Research (IPPSR), and the Michigan Department of Health and Human Services. Michigan BRFS data contribute to the national Behavioral Risk Factor Surveillance System that is managed by the PHSB at the CDC.

In 2018, the total sample size of completed interviews for the core survey was 10,621 (land line = 2,706; cell phone = 7,915). Due to variability in response rates to individual questions and differences in specific sub-populations of interest for particular questions, not all estimates are based on a total sample size of 9,945. As a result, item-by-item sample sizes and population descriptions are included within each table. Furthermore, only comparisons between estimates with non-overlapping 95% confidence intervals should be considered significantly different.

For the 2018 Michigan BRFS, the sample of land line telephone numbers that were utilized for data collection was selected using a list-assisted, random-digit-dialed methodology with a disproportionate stratification based on phone bank density, and whether or not the phone numbers were directory listed. The sample of cell phone numbers used within the 2018 Michigan BRFS data collection process was randomly selected from dedicated cellular telephone banks sorted on the basis of area code and exchange within the State of Michigan.

Iterative proportional fitting or raking was the weighting methodology used to make the 2018 Michigan BRFS data representative of the current Michigan adult population. Estimates based on this methodology were weighted to adjust for the probabilities of selection and a raking adjustment factor that adjusted for the distribution of Michigan adults by telephone source (land line vs. cell phone), detailed race/ethnicity, education level, marital status, age by gender, gender by race/ethnicity, age by race/ethnicity, and renter/owner status.

State-specific, population-based prevalence estimates and asymmetric confidence intervals were calculated for indicators of health status, health risk behaviors, clinical preventive practices, and chronic conditions among the adult population in Michigan. Respondents who refused to answer a question were removed from the denominator during the analysis of such questions. Those who responded "Don't Know/Not Sure" were also excluded from the denominator unless indicated otherwise. All analyses were performed in SAS-Callable SUDAAN®, a statistical computing program that was designed for complex sample surveys.

In an effort to provide the most reliable information possible, prevalence estimates are suppressed if they are based on a denominator of less than 50 respondents or have a relative standard error of greater than 30%.

Due to the BRFSS methodology changes that took place in 2011, the estimates provided within the following tables should only be compared to Michigan BRFSS estimates from 2011-2016 and not to Michigan BRFSS estimates from years prior to 2011.

If you have any questions regarding any of the estimates within the following tables, please contact Allison Murad at murada@michigan.gov.

Table 1: Health Status 2018 Michigan BRFS					
		ral Health, or Poor ^a			
	%	95% Confidence Interval			
Total	19.2	(18.3-20.2)			
Age					
18 – 24	13.0	(10.4-16.2)			
25 – 34	14.6	(12.3-17.4)			
35 – 44	15.9	(13.5-18.6)			
45 – 54	20.4	(18.0-23.0)			
55 – 64	24.7	(22.4-27.1)			
65 – 74	22.4	(20.0-24.9)			
75 +	24.7	(21.6-28.1)			
Gender					
Male	18.3	(16.9-19.7)			
Female	20.1	(18.7-21.6)			
Race/Ethnicity					
White non-Hispanic	17.7	(16.6-18.8)			
Black non-Hispanic	25.7	(22.6-29.0)			
Other non-Hispanic	19.6	(15.6-24.4)			
Hispanic	24.6	(19.0-31.3)			
Education					
Less than high school	33.0	(28.3-38.0)			
High school graduate	24.2	(22.3-26.3)			
Some college	18.9	(17.4-20.5)			
College graduate	8.3	(7.4-9.3)			
Household Income					
< \$20,000	41.3	(37.8-44.9)			
\$20,000 - \$34,999	27.5	(24.8-30.4)			
\$35,000 - \$49,999	20.6	(17.6-23.9)			
\$50,000 - \$74,999	13.7	(11.5-16.4)			
\$75,000 +	7.0	(6.0-8.2)			

^a Among all adults, the proportion who reported that their health, in general, was either fair or poor. (N = 10,322)

Table 2: Health Status on at Least 14 Days in the Past Month 2018 Michigan BRFS

	T	2018 Michiga	IN BKF5			
	Poor Physical Health ^a		Poor Me	ental Health ^b	Activity Limitation ^c	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Total	14.3	(13.4-15.2)	14.3	(13.4-15.2)	10.5	(9.8-11.3)
Age						
18 – 24	7.5	(5.5-10.3)	22.7	(19.3-26.4)	8.9	(6.5-12.0)
25 – 34	7.2	(5.7-9.0)	16.7	(14.1-19.6)	7.1	(5.5-9.1)
35 – 44	11.7	(9.7-14.2)	15.2	(12.9-17.7)	8.7	(7.0-10.9)
45 – 54	16.7	(14.5-19.2)	15.2	(13.1-17.5)	12.9	(10.9-15.2)
55 – 64	20.9	(18.7-23.3)	14.0	(12.2-15.9)	14.8	(12.9-16.8)
65 – 74	18.0	(15.8-20.5)	7.7	(6.3-9.5)	10.1	(8.4-12.0)
75 +	19.3	(16.3-22.7)	6.2	(4.6-8.1)	10.4	(8.3-13.0)
Gender						
Male	12.7	(11.5-13.9)	11.4	(10.2-12.6)	9.5	(8.5-10.7)
Female	15.9	(14.6-17.2)	17.0	(15.7-18.4)	11.5	(10.4-12.6)
Race/Ethnicity						
White non-Hispanic	14.1	(13.1-15.1)	13.9	(12.9-14.9)	9.7	(8.9-10.6)
Black non-Hispanic	16.6	(14.0-19.6)	14.2	(11.8-17.1)	12.2	(9.9-14.8)
Other non-Hispanic	14.7	(11.3-19.0)	15.6	(12.1-19.8)	12.9	(9.6-17.2)
Hispanic	9.7	(6.3-14.6)	19.7	(14.5-26.3)	17.4	(11.9-24.6)
Education						
Less than high school	27.2	(22.8-32.2)	23.9	(19.6-28.7)	22.4	(18.3-27.2)
High school graduate	16.5	(14.9-18.2)	16.2	(14.5-18.1)	11.4	(10.1-12.9)
Some college	13.9	(12.5-15.3)	14.9	(13.4-16.4)	10.0	(8.9-11.3)
College graduate	7.2	(6.4-8.2)	7.7	(6.7-8.8)	5.2	(4.5-6.0)
Household Income						
< \$20,000	31.6	(28.3-35.0)	28.3	(25.2-31.6)	26.2	(23.1-29.4)
\$20,000 - \$34,999	18.8	(16.5-21.4)	18.4	(16.0-21.0)	13.4	(11.3-15.7)
\$35,000 - \$49,999	11.9	(9.8-14.3)	14.0	(11.5-16.9)	8.0	(6.4-10.1)
\$50,000 - \$74,999	10.4	(8.4-12.7)	10.5	(8.5-12.8)	5.8	(4.4-7.7)
\$75,000 +	6.1	(5.1-7.2)	7.8	(6.6-9.3)	5.0	(3.9-6.3)

^a Among all adults, the proportion who reported 14 or more days of poor physical health, which includes physical illness and injury, during the past 30 days. (N =10,130)

b Among all adults, the proportion who reported 14 or more days of poor mental health, which includes stress, depression, and problems with emotions, during the past 30 days. (N =10,185)

c Among all adults, the proportion who reported 14 or more days in the past 30 days in which either poor physical health or poor mental health kept respondents from doing their usual activities, such as self-care, work, and recreation. (N =10,227)

Table 3: Mean Number of Days of Poor Physical Health, Poor Mental Health, and Activity Limitations
2018 Michigan BRFS

	Poor Physical Health ^a		Poor Me	Poor Mental Health ^b		Activity Limitation ^c	
	Mean # of Days	95% Confidence Interval	Mean # of Days	95% Confidence Interval	Mean # of Days	95% Confidence Interval	
Total	4.6	(4.3-4.8)	4.5	(4.3-4.7)	3.2	(3.0-3.4)	
Age							
18 - 24	3.0	(2.4-3.5)	6.9	(6.1-7.7)	2.8	(2.2-3.3)	
25 - 34	2.8	(2.4-3.2)	5.6	(4.9-6.3)	2.3	(1.9-2.7)	
35 - 44	3.7	(3.1-4.3)	4.9	(4.3-5.5)	2.8	(2.3-3.3)	
45 - 54	5.1	(4.5-5.8)	4.7	(4.2-5.3)	3.9	(3.4-4.5)	
55 - 64	6.3	(5.7-6.9)	4.2	(3.7-4.6)	4.2	(3.7-4.7)	
65 - 74	5.4	(4.8-6.0)	2.5	(2.1-2.9)	3.0	(2.5-3.5)	
75 +	6.1	(5.2-7.0)	2.2	(1.7-2.7)	3.1	(2.5-3.8)	
Gender							
Male	4.1	(3.8-4.4)	3.7	(3.4-4.0)	2.9	(2.6-3.2)	
Female	5.0	(4.6-5.3)	5.3	(5.0-5.6)	3.5	(3.2-3.8)	
Race/Ethnicity							
White non-Hispanic	4.5	(4.2-4.7)	4.4	(4.1-4.6)	3.0	(2.8-3.2)	
Black non-Hispanic	5.1	(4.4-5.8)	4.8	(4.2-5.5)	3.7	(3.1-4.3)	
Other non-Hispanic	4.9	(3.9-5.8)	5.1	(4.2-6.0)	3.9	(3.0-4.8)	
Hispanic	3.9	(2.7-5.1)	5.9	(4.5-7.4)	4.7	(3.4-6.0)	
Education							
Less than high school	8.1	(6.9-9.3)	6.7	(5.6-7.8)	6.0	(4.9-7.1)	
High school graduate	5	(4.6-5.4)	5.1	(4.6-5.5)	3.3	(3.0-3.7)	
Some college	4.6	(4.2-4.9)	4.7	(4.3-5.0)	3.2	(2.9-3.5)	
College graduate	2.7	(2.4-2.9)	2.9	(2.7-3.2)	1.8	(1.6-2.0)	
Household Income							
< \$20,000	9.3	(8.4-10.2)	8.4	(7.6-9.2)	7.4	(6.6-8.2)	
\$20,000 - \$34,999	5.8	(5.2-6.4)	5.7	(5.0-6.3)	4.0	(3.5-4.6)	
\$35,000 - \$49,999	4.1	(3.5-4.7)	4.5	(3.9-5.2)	2.7	(2.2-3.1)	
\$50,000 - \$74,999	3.5	(3.0-4.1)	3.3	(2.9-3.8)	1.9	(1.5-2.3)	
\$75,000 +	2.3	(2.0-2.6)	2.8	(2.5-3.1)	1.6	(1.4-1.9)	

^a Among all adults, the mean number of days during the past 30 days in which physical health, including illness and injury, was not good. (N = 10.130)

^b Among all adults, the mean number of days during the past 30 days in which mental health, including stress, depression, and problems with emotions, was not good. (N = 10,185)

c Among all adults, the mean number of days during the past 30 days in which poor physical health or poor mental health kept the respondent from doing usual activities, such as self-care, work, or recreation. (N = 10,227)

Table 4: Disability 2018 Michigan BRFS

2018 Michigan BRFS							
	Total	Disability ^a	Any Activ	rity Limitation ^b	Used Spe	cial Equipment ^o	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval	
Total	27.7	(26.6-28.9)	24.6	(23.5-25.7)	12.2	(11.4-13.1)	
Age							
18 - 24	15.1	(12.2-18.6)	14.1	(11.3-17.5)	3.1	(1.8-5.2)	
25 - 34	16.1	(13.5-19.1)	15.4	(12.8-18.3)	3.3	(2.3-4.6)	
35 - 44	21.4	(18.5-24.6)	19.8	(17.0-23.0)	6.9	(5.2-9.1)	
45 - 54	27.9	(25.2-30.8)	25.9	(23.2-28.7)	12.6	(10.5-15.0)	
55 - 64	36.1	(33.5-38.7)	33.4	(30.9-36.0)	16.5	(14.5-18.7)	
65 - 74	37.1	(34.3-40.0)	30.5	(27.9-33.2)	19.3	(17.0-21.9)	
75 +	45.3	(41.6-49.0)	34.2	(30.8-37.8)	29.9	(26.5-33.6)	
Gender							
Male	26.0	(24.4-27.6)	22.1	(20.6-23.6)	11.7	(10.6-12.9)	
Female	29.4	(27.9-31.1)	26.9	(25.3-28.5)	12.7	(11.6-13.9)	
Race/Ethnicity							
White non-Hispanic	27.4	(26.2-28.7)	24.5	(23.3-25.7)	11.6	(10.7-12.5)	
Black non-Hispanic	29.0	(25.6-32.7)	24.3	(21.1-27.8)	16.9	(14.3-20.0)	
Other non-Hispanic	24.8	(20.2-30.0)	21.7	(17.3-26.7)	11.4	(8.2-15.6)	
Hispanic	27.3	(21.0-34.8)	24.3	(18.2-31.6)	9.3	(5.9-14.3)	
Education							
Less than high school	44.7	(39.2-50.3)	37.3	(32.1-42.8)	25.7	(21.3-30.5)	
High school graduate	28.5	(26.5-30.6)	24.6	(22.7-26.6)	13.5	(12.1-15.2)	
Some college	28.5	(26.7-30.5)	26.2	(24.4-28.1)	11.4	(10.2-12.7)	
College graduate	18.9	(17.5-20.4)	17.0	(15.7-18.5)	6.4	(5.6-7.3)	
Household Income							
< \$20,000	54.0	(50.3-57.7)	47.7	(44.0-51.5)	28.2	(24.9-31.7)	
\$20,000 - \$34,999	35.1	(32.2-38.2)	30.8	(28.0-33.7)	17.7	(15.4-20.2)	
\$35,000 - \$49,999	26.6	(23.6-29.8)	23.7	(20.8-26.8)	10.7	(8.8-13.0)	
\$50,000 - \$74,999	21.8	(19.2-24.7)	19.7	(17.2-22.4)	8.3	(6.6-10.5)	
\$75,000 +	14.4	(12.9-16.1)	12.9	(11.4-14.5)	3.7	(3.0-4.6)	

^a Among all adults, the proportion who reported being limited in any activities because of physical, mental, or emotional problems, or reported that they required use of special equipment (such as a cane, a wheelchair, a special bed, or a special telephone) due to a health problem. (N =9,786)

b Among all adults, the proportion who reported being limited in any activities because of physical, mental, or emotional problems. (N = 9,794)

c Among all adults, the proportion who reported that they required use of special equipment (such as a cane, a wheelchair, a special bed, or a special telephone) due to a health problem. (N =9,824)

Table 5: Weight Status 2018 Michigan BRFS

	l		10 11110	Ingan Diti O		1		
		Obese ^a	Ov	erweight ^b	Healt	hy Weight ^c	Underweight ^d	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Total	33.0	(31.8-34.2)	34.5	(33.3-35.7)	30.7	(29.5-31.9)	1.8	(1.5-2.2)
Age								
18 - 24	18.9	(15.8-22.5)	26.3	(22.7-30.3)	49.2	(45.0-53.5)	5.6	(3.8-8.1)
25 - 34	31.4	(28.1-34.9)	31.6	(28.3-35.2)	35.8	(32.3-39.5)	1.2	(0.7-1.9)
35 - 44	35.9	(32.5-39.3)	35.0	(31.6-38.5)	28.5	(25.5-31.7)	0.7	(0.4-1.2)
45 - 54	39.2	(36.2-42.4)	35.4	(32.5-38.5)	24.5	(22.0-27.3)	8.0	(0.4-1.4)
55 - 64	37.8	(35.2-40.5)	36.4	(33.9-39.1)	24.1	(21.9-26.4)	1.7	(1.0-2.6)
65 - 74	36.2	(33.4-39.1)	37.2	(34.5-40.1)	25.2	(22.7-27.8)	1.4	(0.9-2.2)
75 +	27.1	(23.9-30.6)	39.7	(36.2-43.4)	31.1	(27.7-34.6)	2.1	(1.2-3.6)
Gender								
Male	31.4	(29.8-33.1)	40.0	(38.2-41.8)	27.2	(25.5-28.9)	1.4	(1.0-2.0)
Female	34.6	(32.9-36.4)	29.0	(27.4-30.6)	34.3	(32.6-36.0)	2.2	(1.7-2.8)
Race/Ethnicity								
White non-Hispanic	32.4	(31.1-33.7)	35.0	(33.6-36.3)	30.9	(29.6-32.3)	1.7	(1.4-2.2)
Black non-Hispanic	40.3	(36.4-44.2)	32.7	(29.0-36.6)	25.4	(22.0-29.0)	1.7	(1.0-2.9)
Other non-Hispanic	21.3	(17.2-26.1)	33.0	(27.9-38.6)	41.6	(35.9-47.5)	4.1	(2.4-7.0)
Hispanic	35.5	(28.6-43.1)	34.8	(27.7-42.6)	28.0	(21.8-35.0)	e	e
Education								
< High school	34.9	(29.8-40.4)	31.6	(26.5-37.1)	30.5	(25.6-35.8)	e	e
High school graduate	34.3	(32.0-36.6)	32.3	(30.1-34.6)	31.3	(29.0-33.6)	2.2	(1.6-3.1)
Some college	36.0	(34.0-38.1)	34.4	(32.3-36.5)	28.0	(26.0-30.0)	1.6	(1.2-2.3)
College graduate	26.7	(25.0-28.4)	38.5	(36.7-40.4)	33.7	(31.9-35.5)	1.1	(0.8-1.6)
Household Income								
< \$20,000	39.0	(35.5-42.7)	27.7	(24.4-31.2)	30.9	(27.6-34.4)	2.4	(1.5-3.8)
\$20,000 - \$34,999	36.5	(33.4-39.7)	32.0	(29.0-35.0)	27.9	(25.1-30.9)	3.7	(2.5-5.3)
\$35,000 - \$49,999	36.3	(32.8-40.0)	33.7	(30.3-37.2)	28.5	(25.1-32.1)	e	e
\$50,000 - \$74,999	33.3	(30.2-36.6)	37.5	(34.3-40.9)	28.2	(25.2-31.5)	e	e
\$75,000 +	29.7	(27.7-31.8)	38.4	(36.2-40.7)	30.8	(28.8-33.0)	1.0	(0.6-1.7)

Note: BMI, body mass index, is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)²]. Weight and height were self-reported. Pregnant women were excluded. (N =9,589)

^a Among all adults, the proportion of respondents whose BMI was greater than or equal to 30.0.

^b Among all adults, the proportion of respondents whose BMI was greater than or equal to 25.0, but less than 30.0.

^c Among all adults, the proportion of respondents whose BMI was greater than or equal to 18.5, but less than 25.0.

d Among all adults, the proportion of respondents whose BMI was less than 18.5.

e Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 6: Health Care Coverage 2018 Michigan BRFS						
	No Health Care Coverage ^a (Among 18 - 64 year olds)					
	%	95% Confidence Interval				
Total	9.0	(8.2-10.0)				
Age						
18 - 24	13.1	(10.5-16.2)				
25 - 34	12.8	(10.4-15.5)				
35 - 44	9.2	(7.4-11.5)				
45 - 54	6.9	(5.6-8.6)				
55 - 64	4.6	(3.5-5.8)				
Gender						
Male	11.3	(10.0-12.9)				
Female	6.8	(5.8-7.9)				
Race/Ethnicity						
White non-Hispanic	8.1	(7.2-9.2)				
Black non-Hispanic	9.7	(7.3-12.7)				
Other non-Hispanic	10.4	(7.3-14.7)				
Hispanic	16.3	(11.4-22.9)				
Education						
Less than high school	16.8	(12.4-22.5)				
High school graduate	11.6	(9.8-13.5)				
Some college	8.6	(7.3-10.1)				
College graduate	3.8	(3.1-4.7)				
Household Income						
< \$20,000	12.4	(9.8-15.5)				
\$20,000 - \$34,999	14.9	(12.2-18.0)				
\$35,000 - \$49,999	10.9	(8.4-14.1)				
\$50,000 - \$74,999	8.5	(6.4-11.2)				
\$75,000 +	3.1	(2.3-4.1)				
a Among adults aged 18-64 years, the proportion who reported						

^a Among adults aged 18-64 years, the proportion who reported having no health care coverage, including health insurance, prepaid plans such as HMOs, or government plans, such as Medicare or Indian Health Services. (N = 6,908)

Table 7: Health Care Access 2018 Michigan BRFS						
		al Health Care ovider ^a	No Health Care Access During Past 12 Months Due to Cost ^b			
	%	95% Confidence Interval	%	95% Confidence Interval		
Total	14.9	(14.0-15.9)	11.8	(11.0-12.7)		
Age						
18 - 24	28.6	(24.9-32.5)	14.7	(12.0-17.9)		
25 - 34	29.6	(26.4-33.0)	15.9	(13.6-18.5)		
35 - 44	18.6	(16.0-21.6)	14.0	(11.7-16.8)		
45 - 54	10.3	(8.6-12.3)	12.0	(10.2-14.2)		
55 - 64	6.1	(5.0-7.4)	10.7	(9.2-12.4)		
65 - 74	4.9	(3.7-6.3)	7.0	(5.5-9.1)		
75 +	4.6	(3.2-6.4)	5.7	(4.2-7.6)		
Gender						
Male	19.9	(18.3-21.5)	10.7	(9.6-11.9)		
Female	10.3	(9.2-11.5)	12.8	(11.7-14.1)		
Race/Ethnicity						
White non-Hispanic	13.9	(12.9-15.0)	10.5	(9.6-11.4)		
Black non-Hispanic	17.4	(14.4-20.9)	16.1	(13.4-19.3)		
Other non-Hispanic	18.6	(14.9-22.9)	16.3	(12.7-20.6)		
Hispanic	22.0	(16.4-28.9)	15.0	(10.9-20.4)		
Education						
Less than high school	22.0	(17.5-27.3)	14.3	(10.9-18.6)		
High school graduate	17.2	(15.4-19.2)	13.4	(11.9-15.1)		
Some college	13.8	(12.3-15.4)	12.9	(11.5-14.4)		
College graduate	11.2	(10.0-12.6)	7.2	(6.3-8.3)		
Household Income						
< \$20,000	17.1	(14.4-20.2)	20.1	(17.1-23.4)		
\$20,000 - \$34,999	20.3	(17.8-23.2)	19.4	(17.0-22.1)		
\$35,000 - \$49,999	15.6	(12.9-18.7)	12.9	(10.7-15.5)		
\$50,000 - \$74,999	14.5	(12.1-17.4)	9.8	(7.8-12.2)		
\$75,000 +	10.5	(9.1-12.1)	5.5	(4.4-6.7)		

^a Among all adults, the proportion who reported that they did not have anyone that they thought of as their personal doctor or health care provider. (N = 10,252)

Among all adults, the proportion who reported that in the past 12 months, they could not see a doctor when they needed to due to the cost. (N = 10,298)

Table 8: No Leisure Time Physical Activity 2018 Michigan BRFS					
	No Leis	ure Time Physical Activity ^a			
	%	95% Confidence Interval			
Total	23.8	(22.8-24.9)			
Age					
18 – 24	13.1	(10.7-15.9)			
25 – 34	18.8	(16.1-21.9)			
35 – 44	21.5	(18.8-24.5)			
45 – 54	26.4	(23.7-29.2)			
55 – 64	27.5	(25.2-30.0)			
65 – 74	26.8	(24.3-29.5)			
75 +	36.4	(32.9-40.1)			
Gender					
Male	21.5	(20.0-23.1)			
Female	26.0	(24.5-27.5)			
Race/Ethnicity					
White non-Hispanic	22.6	(21.4-23.8)			
Black non-Hispanic	31.1	(27.7-34.6)			
Other non-Hispanic	22.5	(18.1-27.6)			
Hispanic	25.3	(19.5-32.1)			
Education					
Less than high school	38.6	(33.6-43.9)			
High school graduate	29.3	(27.3-31.4)			
Some college	22.6	(20.9-24.3)			
College graduate	13.3	(12.1-14.6)			
Household Income					
< \$20,000	40.3	(36.8-43.8)			
\$20,000 - \$34,999	30.5	(27.7-33.4)			
\$35,000 - \$49,999	24.6	(21.7-27.8)			
\$50,000 - \$74,999	19.5	(17.0-22.4)			
\$75,000 +	12.7	(11.3-14.2)			

Among all adults, the proportion who reported not participating in any leisure time physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise during the past month. (N = 10,322)

Table 9: Cigarette Smoking 2018 Michigan BRFS

		2018 Michig	an BRFS				
	Current Smoking ^a		Forme	r Smoking ^b	Never Smoked		
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval	
Total	18.9	(17.9-19.9)	26.4	(25.4-27.5)	54.7	(53.4-55.9)	
Age							
18 – 24	12.6	(9.9-15.8)	7.2	(5.4-9.6)	80.2	(76.6-83.4)	
25 – 34	27.5	(24.4-30.9)	16.4	(13.9-19.3)	56.0	(52.4-59.6)	
35 – 44	27.4	(24.3-30.6)	23.1	(20.3-26.1)	49.6	(46.1-53.0)	
45 – 54	20.9	(18.5-23.6)	26.3	(23.7-29.1)	52.7	(49.7-55.8)	
55 – 64	20.3	(18.2-22.6)	32.8	(30.3-35.4)	46.9	(44.2-49.5)	
65 – 74	11.6	(9.9-13.7)	40.4	(37.5-43.2)	48.0	(45.1-50.9)	
75 +	4.7	(3.2-6.7)	44.5	(40.9-48.2)	50.8	(47.1-54.5)	
Gender							
Male	21.1	(19.6-22.7)	29.2	(27.6-30.9)	49.7	(47.9-51.5)	
Female	16.9	(15.6-18.3)	23.8	(22.4-25.3)	59.3	(57.6-61.0)	
Race/Ethnicity							
White non-Hispanic	17.8	(16.7-19.0)	29.4	(28.2-30.7)	52.8	(51.4-54.2)	
Black non-Hispanic	22.7	(19.6-26.1)	16.3	(13.7-19.3)	61.0	(57.1-64.7)	
Other non-Hispanic	21.8	(17.4-27.0)	13.7	(10.8-17.3)	64.5	(59.0-69.6)	
Hispanic	25.9	(19.8-33.3)	17.5	(12.8-23.5)	56.5	(49.1-63.7)	
Education							
Less than high school	36.5	(31.5-41.9)	26.5	(22.1-31.5)	37.0	(31.6-42.7)	
High school graduate	24.0	(22.0-26.1)	26.4	(24.4-28.4)	49.6	(47.2-52.0)	
Some college	18.1	(16.5-19.8)	29.0	(27.1-30.9)	52.9	(50.8-55.1)	
College graduate	7.3	(6.4-8.4)	23.0	(21.5-24.5)	69.7	(68.0-71.3)	
Household Income							
< \$20,000	34.6	(31.2-38.2)	21.5	(18.7-24.5)	43.9	(40.3-47.6)	
\$20,000 - \$34,999	24.7	(22.0-27.6)	28.5	(25.8-31.4)	46.8	(43.6-50.0)	
\$35,000 - \$49,999	19.5	(16.6-22.8)	30.2	(27.1-33.6)	50.3	(46.6-53.9)	
\$50,000 - \$74,999	15.6	(13.2-18.3)	27.9	(25.0-30.9)	56.6	(53.2-59.9)	
\$75,000 +	11.6	(10.1-13.2)	26.6	(24.7-28.6)	61.8	(59.6-64.0)	

^a Among all adults, the proportion who reported that they had ever smoked at least 100 cigarettes (5 packs) in their life and that they smoke cigarettes now, either every day or on some days. (N = 9,953)

Among all adults, the proportion who reported that they had ever smoked at least 100 cigarettes (5 packs) in their life, but they do not smoke cigarettes now. (N = 9,953)

Table 10: Current Smokers Who Attempted to Quit 2018 Michigan BRFS Tried to Quit Smoking One Day or Longer in Past Year^a 95% Confidence % Interval Total 58.6 (55.6-61.6) Age 18 - 2458.2 (45.0-70.4)25 - 3467.2 (60.7-73.1)35 - 4454.6 (47.7-61.3) 45 - 5457.6 (50.7-64.3)55 - 6458.0 (51.9-63.9)65 - 7452.3 (43.7-60.8)42.9 75 + (25.4-62.4)Gender Male 57.4 (53.2-61.5)Female 60.0 (55.7-64.3)Race/Ethnicity White non-Hispanic 55.5 (51.9-58.9)Black non-Hispanic 73.7 (66.1-80.0)Other non-Hispanic 58.3 (45.4-70.2)61.2 Hispanic (45.5-74.8)**Education** Less than high school 59.4 (50.6-67.5)High school graduate 58.4 (53.5-63.1)Some college 59.1 (54.2-63.9)College graduate 55.6 (48.8-62.3)**Household Income** < \$20.000 60.7 (54.3-66.7)\$20,000 - \$34,999 62.7 (56.2-68.7)

62.9

46.8

53.0

(53.9-71.1)

(38.1-55.8)

(45.6-60.2)

\$35,000 - \$49,999

\$50,000 - \$74,999

\$75,000 +

^a Among current smokers, the proportion who reported that during the past 12 months, they had tried to quit smoking for one day or longer. (N = 1,655)

Table 11: E-Cigarette Use 2018 Michigan BRFS				
	Current l	E-Cigarette Use ^a		
	%	95% Confidence Interval		
Total	6.0	(5.2-6.9)		
Age				
18 – 24	22.1	(17.7-27.2)		
25 – 34	6.6	(4.8-9.1)		
35 – 44	6.3	(4.4-8.9)		
45 – 54	3.2	(2.0-4.9)		
55 – 64	3.3	(2.2-4.9)		
65 – 74	1.6	(0.9-2.8)		
75 +	0.3	(0.1-2.0)		
Gender				
Male	8.0	(6.7-9.5)		
Female	4.1	(3.2-5.1)		
Race/Ethnicity				
White non-Hispanic	6.0	(5.1-7.0)		
Black non-Hispanic	2.9	(1.5-5.3)		
Other non-Hispanic	9.8	(6.1-15.3)		
Hispanic	12.6	(6.6-22.7)		
Education				
Less than high school	9.9	(6.0-15.8)		
High school graduate	8.2	(6.6-10.2)		
Some college	5.9	(4.7-7.3)		
College graduate	2.1	(1.5-2.9)		
Household Income				
< \$20,000	6.0	(4.3-8.5)		
\$20,000 - \$34,999	6.1	(4.4-8.6)		
\$35,000 - \$49,999	5.8	(4.0-8.5)		
\$50,000 - \$74,999	6.1	(4.2-8.9)		
\$75,000 +	5.5	(4.0-7.5)		

^a Among all adults, the proportion who reported that they currently use ecigarettes or other electronic vaping products, either every day or on some days. (N = 6,364)

^b Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 12: Smokeless Tobacco Use 2018 Michigan BRFS					
		nt Smokeless pacco Useª			
	%	95% Confidence Interval			
Total	2.9	(2.5-3.4)			
Age					
18 – 24	3.4	(2.1-5.5)			
25 – 34	4.2	(3.1-5.7)			
35 – 44	4.5	(3.3-6.0)			
45 – 54	3.7	(2.7-5.0)			
55 – 64	1.6	(1.1-2.4)			
65 – 74	1.5	(0.8-2.6)			
75 +	b	b			
Gender					
Male	5.2	(4.4-6.1)			
Female	0.7	(0.5-1.1)			
Race/Ethnicity					
White non-Hispanic	3.2	(2.8-3.8)			
Black non-Hispanic	b	b			
Other non-Hispanic	3.3	(1.9-5.7)			
Hispanic	b	b			
Education					
Less than high school	3.9	(2.3-6.7)			
High school graduate	4.4	(3.5-5.5)			
Some college	2.3	(1.8-3.0)			
College graduate	1.7	(1.3-2.2)			
Household Income					
< \$20,000	3.2	(2.0-5.1)			
\$20,000 - \$34,999	3.8	(2.8-5.2)			
\$35,000 - \$49,999	3.1	(2.0-4.8)			
\$50,000 - \$74,999	2.4	(1.6-3.8)			
\$75,000 +	2.9	(2.3-3.8)			

^a Among all adults, the proportion who reported that they currently use chewing tobacco, snuff or snus, either every day or on some days. (N = 9,993)

^b Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 13: Hookah Use 2018 Michigan BRFS					
	Current	t Hookah Use ^a			
	%	95% Confidence Interval			
Total	3.1	(2.5-3.8)			
Age					
18 – 24	7.7	(5.1-11.6)			
25 – 34	4.1	(2.7-6.2)			
35 – 44	4.2	(2.6-6.6)			
45 – 54	2.2	(1.3-3.6)			
55 – 64	1.9	(1.2-3.1)			
65 – 74	b	b			
75 +	b	b			
Gender					
Male	4.0	(3.1-5.2)			
Female	2.2	(1.6-3.0)			
Race/Ethnicity					
White non-Hispanic	2.3	(1.7-3.0)			
Black non-Hispanic	5.9	(3.9-8.8)			
Other non-Hispanic	6.8	(3.9-11.6)			
Hispanic	b	b			
Education					
Less than high school	b	b			
High school graduate	4.2	(3.1-5.7)			
Some college	3.0	(2.1-4.2)			
College graduate	1.5	(1.0-2.3)			
Household Income					
< \$20,000	3.2	(2.0-5.3)			
\$20,000 - \$34,999	4.4	(2.9-6.7)			
\$35,000 - \$49,999	3.5	(2.1-5.7)			
\$50,000 - \$74,999	3.1	(1.8-5.3)			
\$75,000 +	2.8	(1.8-4.3)			

^a Among all adults, the proportion who reported smoking tobacco using a hookah, narghile, or water pipe on one or more days during the previous thirty day. (N = 6,295)

^b Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 14: Alcohol Consumption 2018 Michigan BRFS

		2018 Michig	an BRFS			
		ohol in Past Ionth ^a	Heavy Drinking ^b		Binge	Drinking ^c
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Total	55.7	(54.4-56.9)	6.0	(5.5-6.6)	17.2	(16.2-18.2)
Age						
18 – 24	52.3	(48.0-56.5)	6.8	(5.1-8.9)	26.1	(22.6-29.9)
25 – 34	63.6	(60.0-67.1)	7.0	(5.5-9.0)	26.8	(23.9-30.0)
35 – 44	62.9	(59.4-66.2)	7.6	(6.0-9.6)	21.2	(18.6-24.1)
45 – 54	61.5	(58.4-64.5)	5.9	(4.7-7.4)	18.7	(16.5-21.2)
55 – 64	54.8	(52.1-57.5)	6.3	(5.1-7.6)	13.2	(11.6-15.1)
65 – 74	48.6	(45.7-51.5)	5.4	(4.3-6.7)	6.9	(5.6-8.4)
75 +	38.2	(34.8-41.8)	1.8	(1.2-2.8)	2.8	(1.8-4.2)
Gender						
Male	60.6	(58.8-62.4)	6.7	(5.9-7.7)	22.3	(20.8-23.9)
Female	51.0	(49.3-52.8)	5.4	(4.7-6.1)	12.3	(11.3-13.5)
Race/Ethnicity						
White non-Hispanic	57.3	(55.9-58.7)	6.5	(5.8-7.2)	17.7	(16.6-18.8)
Black non-Hispanic	51.2	(47.3-55.2)	4.2	(2.9-6.0)	13.4	(10.9-16.3)
Other non-Hispanic	48.0	(42.4-53.7)	5.4	(3.6-8.0)	15.3	(11.7-19.8)
Hispanic	49.7	(42.3-57.2)	5.0	(3.1-8.1)	21.9	(16.2-28.9)
Education						
Less than high school	35.9	(30.7-41.5)	5.0	(3.2-7.9)	15.0	(11.3-19.6)
High school graduate	48.9	(46.5-51.3)	5.6	(4.7-6.7)	17.2	(15.4-19.0)
Some college	58.4	(56.3-60.5)	7.0	(6.0-8.2)	17.9	(16.3-19.7)
College graduate	67.4	(65.6-69.2)	5.7	(4.9-6.6)	17.3	(15.9-18.8)
Household Income						
< \$20,000	37.9	(34.4-41.6)	5.1	(3.7-7.1)	12.7	(10.4-15.4)
\$20,000 - \$34,999	45.8	(42.6-49.0)	6.5	(5.2-8.2)	14.5	(12.4-17.0)
\$35,000 - \$49,999	55.2	(51.5-58.8)	5.2	(3.8-7.0)	17.6	(14.7-20.9)
\$50,000 - \$74,999	61.4	(58.0-64.7)	6.6	(5.2-8.3)	19.3	(16.8-22.1)
\$75,000 +	72.1	(70.0-74.1)	7.4	(6.3-8.6)	23.3	(21.4-25.4)

^a Among all adults, the proportion who reported consuming at least one drink of any alcoholic beverage in the previous month. (N = 9,882)

hamong all adults, the proportion who reported consuming an average of more than two alcoholic drinks per day for men or more than one per day for women in the previous month. (N = 9,772)

c Among all adults, the proportion who reported consuming five or more drinks per occasion (for men) or 4 or more drinks per occasion (for women) at least once in the previous month. (N = 9,801)

Table 15: Mean Number of Binge Drinking Occasions during the Past Month among Binge Drinkers
2018 Michigan BRFS

		of Binge Drinking Occasions ^a
	Mean	95% Confidence Interval
Total	4.8	(4.4-5.2)
Age		
18 – 24	4	(3.4-4.6)
25 – 34	4.1	(3.4-4.9)
35 – 44	5.9	(4.3-7.4)
45 – 54	4.2	(3.4-5.0)
55 – 64	5.6	(4.5-6.7)
65 – 74	5.7	(4.2-7.3)
75+	6.6	(2.6-10.6)
Gender		
Male	5.3	(4.7-5.9)
Female	3.9	(3.3-4.4)
Race/Ethnicity		
White non-Hispanic	4.8	(4.3-5.3)
Black non-Hispanic	5.1	(3.5-6.6)
Other non-Hispanic	4	(2.9-5.0)
Hispanic	4.5	(3.0-6.0)
Education		
Less than high school	7.5	(4.8-10.2)
High school graduate	5	(4.3-5.7)
Some college	4.8	(4.1-5.6)
College graduate	3.5	(3.1-3.9)
Household Income		
< \$20,000	7.6	(5.0-10.1)
\$20,000 - \$34,999	5.9	(4.6-7.3)
\$35,000 - \$49,999	3.8	(3.0-4.6)
\$50,000 - \$74,999	4.4	(3.5-5.4)
\$75,000 +	3.9	(3.4-4.3)

^a Among adults who binge drank in the past month, the mean number of times during which five or more alcoholic beverages (for men) or four or more (for women) were consumed during the past month. (N = 1,547)

Table 16: Drove Motor Vehicle After Drinking 2018 Michigan BRFS **Drove Motor Vehicle** After Drinking^a 95% Confidence % Interval **Total** 2.1 (1.7-2.5)Age 18 - 242.9 (1.8-4.5)25 - 343.1 (2.1-4.7)35 - 441.4 (0.8-2.4)2.1 45 - 54(1.4-3.1)55 - 642.1 (1.5-2.9)65 - 741.6 (1.0-2.4)__b __b 75 + Gender Male 3.0 (2.4-3.7)Female 1.2 (0.9-1.7)Race/Ethnicity White non-Hispanic 2.2 (1.8-2.6)Black non-Hispanic 1.6 (0.9-2.9)Other non-Hispanic __b __b __b Hispanic __b **Education** __b __b Less than high school High school graduate 2.0 (1.5-2.8)Some college 1.9 (1.4-2.6)2.5 College graduate (2.0-3.2)**Household Income** < \$20,000 __b __b \$20,000 - \$34,999 1.9 (1.3-2.8)\$35,000 - \$49,999 1.9 (1.1-3.2)\$50,000 - \$74,999 2.3 (1.5-3.6)\$75,000 + 2.9 (2.2-3.8)

^a Among adults who reporting drinking any alcohol within the past 30 days, the proportion who reported that they had driven when they'd had too much to drink at least once in the previous month. (N = 9,901)

b Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 17: Seatbelt Use	9
2018 Michigan BRFS	

	Always I	Jses a Seatbelt ^a
	%	95% Confidence Interval
Total	84.5	(83.6-85.4)
Age		
18 – 24	73.3	(69.5-76.8)
25 – 34	81.2	(78.3-83.7)
35 – 44	83.5	(80.8-85.9)
45 – 54	85.1	(82.7-87.3)
55 – 64	90.0	(88.4-91.4)
65 – 74	90.2	(88.3-91.9)
75 +	89.1	(86.6-91.1)
Gender		
Male	80.6	(79.1-82.1)
Female	88.3	(87.1-89.4)
Race/Ethnicity		
White non-Hispanic	86.1	(85.0-87.0)
Black non-Hispanic	80.2	(77.0-83.1)
Other non-Hispanic	83.3	(79.0-86.8)
Hispanic	78.1	(70.9-83.9)
Education		
Less than high school	80.8	(76.2-84.7)
High school graduate	82.1	(80.2-83.9)
Some college	84.8	(83.2-86.3)
College graduate	88.8	(87.5-89.9)
Household Income		
< \$20,000	83.2	(80.2-85.8)
\$20,000 - \$34,999	85.9	(83.5-88.0)
\$35,000 - \$49,999	83.9	(80.8-86.6)
\$50,000 - \$74,999	87.4	(85.0-89.6)
\$75,000 +	88.2	(86.5-89.6)

^a Among all adults, the proportion who reported always using a seatbelt when driving or riding in a car. (N = 10,322)

Table 18: No Routine Checkup in Past Year 2018 Michigan BRFS **Had No Routine Checkup** in Past Year^a 95% % Confidence Interval Total 20.5 (19.4-21.5)Age 18 - 24 (23.0-30.4)26.5 25 - 34 35.5 (32.2-39.0)35 - 44 26.2 (23.4-29.3)45 - 54 19.5 (17.2-21.9)55 - 64 15.0 (13.2-17.0)65 - 74(6.7-9.7)8.1 75 + 7.6 (5.9-9.8)Gender Male 24.6 (23.0-26.3)Female 16.5 (15.2-17.9)Race/Ethnicity White non-Hispanic 21.1 (20.0-22.3)Black non-Hispanic 16.2 (13.4-19.5)Other non-Hispanic 19.6 (15.6-24.3)Hispanic 25.8 (20.1-32.5)**Education** Less than high school 22.2 (17.8-27.2)High school graduate 21.0 (19.0-23.0)Some college 20.6 (18.8-22.4)College graduate 19.3 (17.9-20.9)**Household Income** < \$20,000 21.0 (18.1-24.2)\$20,000 - \$34,999 20.7 (18.1-23.5)\$35,000 - \$49,999 20.6 (17.7-23.9)\$50,000 - \$74,999 22.4 (19.7-25.5)\$75,000 + 19.7 (17.9-21.6)

^a Among all adults, the proportion who reported that they did not have a routine checkup in the past year. (N = 10,203)

Table 19: Mammography Indicators Among Women Aged 40 Years and Older 2018 Michigan BRFS **Had Mammogram Had Mammogram** Ever Had Mammogram^a in Past TwoYears^c in Past Year^b 95% 95% 95% Confidence % % Confidence % Confidence Interval Interval Interval **Total** 93.2 (92.0-94.2)54.9 (52.9-56.9)69.6 (67.7-71.4) Age 40 - 49 80.7 (76.5-84.3)47.5 (42.7-52.3)59.6 (54.9-64.1)50 - 59 95.8 (94.0-97.1)57.4 (53.4-61.3)74.2 (70.5-77.6)60 - 69 97.1 (95.2 - 98.3)60.8 (57.1-64.5)77.6 (74.3-80.6)70 + 96.9 (94.8 - 98.1)52.5 (48.8-56.2)64.9 (61.3-68.4)Race/Ethnicity White non-Hispanic 93.3 (92.0-94.5)55.3 (53.1-57.4)69.9 (67.8-71.9)Black non-Hispanic 93.0 (89.1-95.6)55.8 (49.1-62.3)68.6 (62.4-74.2)__d __d 68.6 Other non-Hispanic 48.3 (36.6-60.1)(56.9-78.4)__d __d 42.8 76.5 (63.0-86.1)Hispanic (29.0-57.7)**Education** < High school 89.3 (81.5-94.1)45.1 (35.5-55.1)57.3 (47.7-66.4)High school graduate 92.6 (90.1 - 94.5)52.8 (49.0-56.6)66.2 (62.6-69.6)Some college 94.2 (92.1-95.7)56.3 (52.9-59.7)71.7 (68.6-74.7)College graduate 93.7 (91.8 - 95.1)58.7 (55.6-61.7)75.3 (72.6-77.9)**Household Income** < \$20,000 92.8 (89.0 - 95.3)48.6 (42.7-54.6)65.8 (60.3-71.0)\$20,000 - \$34,999 90.0 (86.2 - 92.9)46.4 65.4 (41.5-51.3)(60.5-70.0)\$35,000 - \$49,999 __d 55.4 (49.7-61.1)70.6 (65.1-75.6)\$50,000 - \$74,999 93.4 (89.3-96.0)59.2 (53.8-64.3)74.3 (69.2-78.7)

Note: Data included diagnostic tests.

\$75,000 +

(91.4 - 95.3)

61.4

(57.7-64.9)

77.8

(74.5-80.7)

93.6

^a Among women aged 40 years and older, the proportion who reported ever having a mammogram. (N = 3,919)

^b Among women aged 40 years and older, the proportion who reported having a mammogram in the past year. (N = 3,873)

^c Among women aged 40 years and older, the proportion who reported having a mammogram in the past two years. (N = 4,060)

^d Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 20: Cervical Cancer Screening Among Women Aged 18 Years and Older 2018 Michigan BRFS

	Ever Had	Pap Test ^a	Had Appropriately Timed Pap Test ^b		
	%	95% Confidence Interval	%	95% Confidence Interval	
Total	89.8	(88.3-91.1)	73.3	(71.4-75.1)	
Age					
18 - 29	63.3	(58.4-67.9)	59.3	(54.4-64.0)	
30 - 39	97.4	(95.6-98.5)	89.3	(85.5-92.2)	
40 - 49	c	c	86.2	(82.5-89.3)	
50 - 59	c	c	84.8	(81.2-87.8)	
60 - 69	c	c	73.6	(69.1-77.6)	
70 +	94.3	(90.2-96.7)	39.0	(34.1-44.2)	
Race/Ethnicity					
White non-Hispanic	90.2	(88.4-91.7)	71.5	(69.3-73.6)	
Black non-Hispanic	92.6	(89.0-95.1)	82.5	(77.8-86.3)	
Other non-Hispanic	82.6	(73.8-89.0)	71.4	(61.9-79.4)	
Hispanic	83.1	(70.8-90.8)	77.7	(65.5-86.5)	
Education					
Less than high school	87.2	(78.8-92.6)	66.8	(57.3-75.2)	
High school graduate	83.8	(79.9-87.1)	65.3	(61.1-69.2)	
Some college	90.2	(87.8-92.2)	73.6	(70.4-76.5)	
College graduate	95.5	(93.9-96.7)	82.1	(79.9-84.2)	
Household Income					
< \$20,000	91.7	(87.9-94.4)	71.9	(66.6-76.6)	
\$20,000 - \$34,999	88.1	(83.9-91.3)	69.3	(64.4-73.8)	
\$35,000 - \$49,999	93.3	(88.1-96.4)	71.7	(65.7-77.0)	
\$50,000 - \$74,999	91.4	(86.7-94.6)	74.9	(69.6-79.5)	
\$75,000 +	92.8	(90.2-94.7)	81.5	(78.3-84.4)	

Note: Data includes diagnostic tests and excludes women who have had a hysterectomy.

^a Among women aged 18 years and older, the proportion who reported ever having a Pap test. (N = 3,799)

b Among women aged 18 years and older, the proportion who reported having a Pap test within the previous three years. (N = 3,706)

^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 21: Prostate Cancer Screening Among Men Aged 50 Years and Older 2018 Michigan BRFS **Ever Discussed Doctor Ever** Had PSA Test in Advantages of PSA Recommended Ever Had PSA Test^c Past Yeard **Test With Doctor**^a PSA Testb 95% 95% 95% 95% % Confidence % Confidence % Confidence % Confidence Interval Interval Interval Interval Total 53.4 (51.0-55.9)50.2 (47.8-52.7)57.1 (54.6-59.5)33.5 (31.2 - 35.9)Age 50 - 59 42.5 (38.4-46.6)38.4 (34.4-42.5)40.8 (36.8-45.0)24.4 (20.9-28.2)60 - 6958.2 (54.2-62.2)54.2 (50.1-58.2)60.7 (56.6-64.7)36.1 (32.2-40.1)70 + 61.3 (56.8-65.6)60.3 (55.8-64.6)73.5 (69.1-77.4)42.4 (38.0-46.9)Race/Ethnicity 53.5 (50.9-56.2)50.7 (48.0-53.3)58.0 (55.3-60.7)34.6 White non-Hispanic (32.1-37.1)57.2 52.2 58.4 32.2 Black non-Hispanic (48.4-65.6)(43.5-60.8)(49.6-66.8)(24.6-41.0)Other non-Hispanic 42.4 (31.1-54.5)38.7 (27.7-51.1)36.8 (26.3-48.7)23.6 (15.0-35.1)Hispanic 30.1 (16.2-49.1)__e __e __e __e __e __e **Education** < High school 35.5 (26.9-45.2)32.2 (23.8-41.8)43.1 (33.5-53.3)24.0 (16.3-33.9)46.2 (41.6-50.9)41.9 (37.3-46.6)47.3 28.7 High school graduate (42.6-52.1)(24.6-33.3)Some college 55.3 (50.9-59.5)54.0 (49.6-58.3)61.0 (56.6-65.1)36.7 (32.5-41.1)College graduate 66.3 (62.9-69.5)61.8 (58.3-65.1)68.1 (64.7-71.3)38.6 (35.2-42.1)**Household Income** < \$20,000 37.9 (30.9-45.4)31.8 (25.5-38.9)37.6 (30.7-44.9)21.5 (16.0-28.2)(34.3-46.3)\$20,000 - \$34,999 40.1 37.9 (32.1-44.0)45.7 (39.4-52.0)22.2 (17.5-27.8)\$35,000 - \$49,999 (49.1-62.4)38.3 55.9 55.7 (48.9-62.2)62.8 (56.0-69.1)(31.9-45.1)\$50,000 - \$74,999 59.9 (53.3-66.1)57.0 (50.4-63.4)61.0 (54.3-67.3)38.8 (32.3-45.7)

Among men aged 50 years and older (N = 2,586), the proportion who reported...

63.3

(53.9-62.0)

65.0

(61.0-68.9)

39.7

58.0

(59.2-67.1)

\$75,000 +

(35.8-43.7)

^a ever discussing the advantages of a Prostate-Specific Antigen (PSA) test with a doctor, nurse, or other health professional.

bever receiving a recommendation from a doctor, nurse, or other health professional to get a PSA test.

^c ever having a PSA test.

d having a PSA test within the past year.

e Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 22: Colorectal Cancer Screening (Blood Stool Test)
Among Adults Aged 50 Years and Older
2018 Michigan BRFS

	Ever Had Blood Stool Test ^a			d Stool Test Two Years ^b
	%	95% Confidence Interval	%	95% Confidence Interval
Total	32.5	(31.0-34.0)	9.8	(8.8-10.8)
Age				
50 - 59	20.7	(18.5-23.1)	6.7	(5.4-8.2)
60 - 69	34.6	(32.1-37.2)	10.6	(9.1-12.4)
70 +	43.7	(40.9-46.4)	15.4	(12.8-18.4)
Gender				
Male	31.5	(29.3-33.7)	9.9	(8.5-11.5)
Female	33.4	(31.4-35.5)	9.7	(8.4-11.2)
Race/Ethnicity				
White non-Hispanic	32.5	(30.9-34.1)	9.6	(8.6-10.7)
Black non-Hispanic	32.5	(27.4-38.0)	10.2	(7.1-14.3)
Other non-Hispanic	33.5	(25.6-42.5)	11.0	(6.4-18.3)
Hispanic	27.9	(18.0-40.6)	c	c
Education				
Less than high school	21.7	(16.6-27.9)	6.8	(4.0-11.5)
High school graduate	31.5	(28.8-34.3)	9.8	(8.0-11.9)
Some college	35.3	(32.7-38.0)	11.1	(9.3-13.2)
College graduate	34.1	(31.8-36.4)	9.1	(7.7-10.6)
Household Income				
< \$20,000	32.8	(28.5-37.4)	13.4	(10.3-17.2)
\$20,000 - \$34,999	33.1	(29.5-36.9)	9.8	(7.5-12.7)
\$35,000 - \$49,999	34.9	(30.9-39.2)	11.5	(8.8-14.9)
\$50,000 - \$74,999	35.7	(31.6-39.9)	9.8	(7.4-13.0)
\$75,000 +	29.3	(26.8-32.0)	7.6	(6.2-9.4)

^a Among adults aged 50 years and older, the proportion who reported ever having a blood stool test using a home kit. (N = 5,903)

b Among adults aged 50-75, the proportion whose reported having a blood stool test within the past two years using a home kit (N = 4,774)

^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 23: Colorectal Cancer Screening (Sigmoidoscopy/Colonoscopy)

Among Adults Aged 50 Years and Older

2018 Michigan BRFS

		2018 Michig	jan BRFS			
	Sigmoi	er Had a doscopy or noscopy ^a	Had a Sigmoidoscopy or Colonoscopy in Past 5 Years ^b		Had a Sigmoidoscopy Past 5 Years or Colonoscopy in Past ' Years ^c	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Total	76.5	(75.1-77.9)	58.1	(56.5-59.7)	70.1	(68.5-71.6)
Age						
50 - 59	66.9	(64.1-69.6)	55.5	(52.6-58.4)	63.6	(60.7-66.3)
60 - 69	80.5	(78.1-82.6)	61.2	(58.5-63.8)	73.7	(71.1-76.1)
70 +	83.1	(80.8-85.1)	57.6	(54.8-60.4)	73.6	(70.9-76.1)
Gender						
Male	76.1	(73.9-78.2)	59.6	(57.3-62.0)	70.3	(68.0-72.5)
Female	76.9	(74.9-78.8)	56.8	(54.6-59.0)	69.9	(67.7-71.9)
Race/Ethnicity						
White non-Hispanic	77.7	(76.2-79.2)	58.2	(56.5-60.0)	70.8	(69.1-72.4)
Black non-Hispanic	69.1	(63.4-74.2)	59.0	(53.2-64.5)	65.5	(59.7-70.8)
Other non-Hispanic	68.6	(59.3-76.7)	51.1	(41.9-60.3)	62.8	(53.3-71.4)
Hispanic	73.3	(59.0-84.0)	48.3	(35.4-61.4)	68.3	(53.5-80.2)
Education						
Less than high school	65.0	(58.0-71.5)	51.5	(44.3-58.6)	57.6	(50.3-64.6)
High school graduate	72.3	(69.5-74.9)	53.8	(50.7-56.8)	65.4	(62.4-68.2)
Some college	79.7	(77.3-81.9)	60.1	(57.3-62.8)	73.0	(70.3-75.4)
College graduate	82.0	(80.0-83.8)	63.1	(60.8-65.4)	76.5	(74.3-78.5)
Household Income						
< \$20,000	66.1	(61.5-70.4)	51.4	(46.5-56.2)	59.5	(54.7-64.1)
\$20,000 - \$34,999	73.4	(69.3-77.1)	54.8	(50.7-58.9)	65.3	(61.1-69.2)
\$35,000 - \$49,999	78.6	(74.5-82.1)	57.8	(53.3-62.2)	72.2	(68.0-76.1)
\$50,000 - \$74,999	80.5	(76.7-83.9)	61.6	(57.2-65.8)	74.4	(70.1-78.2)
\$75,000 +	80.8	(78.3-83.1)	62.0	(59.1-64.8)	75.0	(72.3-77.5)

^a Among adults aged 50 years and older, the proportion who reported ever having a sigmoidoscopy or colonoscopy. (N = 5,926) ^b Among adults aged 50 years and older, the proportion who reported having a sigmoidoscopy or colonoscopy in the past five years. (N = 5,835)

c Among adults aged 50 years and older, the proportion who reported having a sigmoidoscopy in the past five years or a colonoscopy in the past ten years. (N = 5,774)

Table 24: Appropriate Colorectal Cancer Screening Among Adults 50 Years and Older 2018 Michigan BRFS **Appropriate Colorectal** Cancer Screening^a 95% % Confidence Interval (72.1-75.1) **Total** 73.6 Age 50 - 59 66.7 (63.9-69.4)60 - 69 77.8 (75.3-80.0) 70 + 76.9 (74.3-79.3)Gender Male 73.8 (71.6-76.0)Female 73.4 (71.3-75.4)Race/Ethnicity White non-Hispanic 74.3 (72.7-75.8)Black non-Hispanic 69.2 (63.5-74.4)Other non-Hispanic 67.7 (58.4-75.8) (54.5-81.3) Hispanic 69.5 **Education** Less than high school 60.4 (53.1-67.3)High school graduate 69.5 (66.6-72.3)Some college 76.9 (74.4-79.2)College graduate 79.1 (77.0-81.0)**Household Income** < \$20,000 64.9 (60.2-69.3)\$20,000 - \$34,999 69.0 (64.8-72.8)\$35,000 - \$49,999 75.9 (71.8-79.5)\$50,000 - \$74,999 79.1 (75.0-82.6)\$75,000 + 77.2 (74.6-79.7)

^a Among adults aged 50 years and older, the proportion who reported having either a fecal occult blood test within the past year, a sigmoidoscopy within the past five years, or a colonoscopy within the past ten years. (N = 5,786)

Table 25: Oral Health 2018 Michigan BRFS					
		ental Visit ast Year ^a	6+ Tee	th Missing ^b	
	%	95% Confidence Interval	%	95% Confidence Interval	
Total	29.0	(27.8-30.2)	14.7	(13.8-15.5)	
Age					
18 - 24	26.3	(22.9-30.1)	c	c	
25 - 34	38.3	(34.8-41.9)	4.9	(3.4-6.8)	
35 - 44	30.0	(26.9-33.2)	7.0	(5.5-8.9)	
45 - 54	27.3	(24.6-30.1)	12.8	(10.8-15.1)	
55 - 64	26.3	(24.1-28.7)	21.7	(19.6-24.1)	
65 - 74	25.6	(23.0-28.3)	27.4	(24.8-30.2)	
75 +	29.7	(26.4-33.3)	37.7	(34.1-41.4)	
Gender					
Male	31.3	(29.6-33.1)	13.9	(12.7-15.2)	
Female	26.8	(25.2-28.4)	15.4	(14.2-16.6)	
Race/Ethnicity					
White non-Hispanic	27.1	(25.8-28.4)	14.7	(13.7-15.7)	
Black non-Hispanic	34.3	(30.8-38.1)	18.5	(15.8-21.5)	
Other non-Hispanic	34.4	(29.4-39.8)	9.7	(7.3-12.9)	
Hispanic	39.5	(32.7-46.7)	9.1	(5.6-14.3)	
Education					
Less than high school	49.1	(43.7-54.6)	34.5	(29.7-39.6)	
High school graduate	34.5	(32.3-36.7)	18.4	(16.8-20.1)	
Some college	28.0	(26.1-29.9)	12.8	(11.6-14.2)	
College graduate	16.0	(14.7-17.4)	5.2	(4.5-6.0)	
Household Income					
< \$20,000	49.9	(46.2-53.6)	32.2	(29.0-35.6)	
\$20,000 - \$34,999	40.4	(37.4-43.6)	22.6	(20.1-25.3)	
\$35,000 - \$49,999	29.8	(26.6-33.2)	17.3	(14.8-20.2)	
\$50,000 - \$74,999	23.6	(20.8-26.7)	10.4	(8.5-12.6)	
\$75,000 +	14.9	(13.3-16.7)	4.1	(3.4-5.0)	

^a Among all adults, the proportion who reported that they had not visited a dentist or dental clinic for any reason in the previous year. (N = 10,231)

Among all adults, the proportion who reported that they were missing 6+ teeth due to tooth decay or gum disease. This excludes teeth lost for other reasons, such as injury or orthodontics. (N = 10,116)

Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 26: Immunizations among Adults Aged 65 Years and Older 2018 Michigan BRFS

		Had Flu		E	er Had
		in Past			er Had nia Vaccine ^b
		%	95% Confidence Interval	%	95% Confidence Interval
Total		51.9	(49.6-54.1)	70.0	(67.8-72.1)
Age					
65	5 - 74	49.8	(47.0-52.7)	66.5	(63.5-69.3)
75	5+	54.8	(51.1-58.5)	75.0	(71.8-78.0)
Gender					
Ma	ale	52.0	(48.5-55.5)	67.9	(64.5-71.2)
Fe	emale	51.7	(48.7-54.7)	71.6	(68.8-74.3)
Race/Eth	nicity				
W	hite non-Hispanic	53.5	(51.0-55.9)	72.5	(70.3-74.6)
BI	ack non-Hispanic	38.4	(30.3-47.2)	52.4	(43.7-60.9)
Ot	ther non-Hispanic	43.5	(30.5-57.6)	69.6	(55.0-81.1)
Hi	ispanic	52.7	(28.4-75.8)	c	c
Education	n				
Le	ess than high school	42.0	(32.8-51.8)	65.3	(55.3-74.1)
Hi	igh school graduate	46.6	(42.4-50.9)	68.3	(64.2-72.2)
Sc	ome college	54.7	(50.9-58.6)	72.2	(68.5-75.5)
Co	ollege graduate	58.7	(55.4-62.0)	71.6	(68.5-74.5)
Househo	ld Income				
< 3	\$20,000	46.7	(39.7-53.7)	63.5	(56.2-70.2)
\$2	20,000 - \$34,999	47.2	(41.9-52.5)	70.5	(65.1-75.5)
\$3	35,000 - \$49,999	58.9	(53.5-64.1)	73.5	(68.3-78.0)
\$5	50,000 - \$74,999	55.1	(48.7-61.3)	75.3	(69.6-80.3)
\$7	75,000 +	55.8	(51.0-60.5)	73.2	(68.7-77.3)

^a Among adults aged 65 years and older, the proportion who reported that they had a flu vaccine, either by an injection in the arm or sprayed in the nose during the past 12 months. (N = 3,133)

b Among adults aged 65 years and older, the proportion who reported that they ever had a pneumococcal vaccine. (N = 3,215)

^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 27: HIV Testing among Adults Aged 18 - 64 Years 2018 Michigan BRFS Ever Had an HIV Testa 95% Confidence % Interval **Total** 44.6 (43.1-46.1)Age 18 - 2424.4 (20.9-28.2)25 - 34(49.5-56.7)53.1 35 - 4459.3 (55.9-62.7)45 - 5449.7 (46.6-52.8)55 - 6435.2 (32.7-37.8)Gender Male 39.0 (36.9-41.1)Female 50.2 (48.0-52.3)Race/Ethnicity White non-Hispanic 39.4 (37.7-41.1)Black non-Hispanic 73.2 (69.0-77.1)Other non-Hispanic 36.5 (31.0-42.2)Hispanic 50.9 (43.0-58.7)**Education** Less than high school 54.8 (48.0-61.4)High school graduate 40.7 (37.9-43.5)Some college 44.2 (41.7-46.8)College graduate 45.5 (43.3-47.8)**Household Income** < \$20,000 57.8 (53.5-62.1)\$20,000 - \$34,999 51.8 (47.8-55.7)\$35,000 - \$49,999 42.8 (38.2-47.6)\$50,000 - \$74,999 41.8 (38.0-45.8)

\$75,000 +

41.8

(39.3-44.3)

^a Among adults aged 18 - 64 years, the proportion who reported that they ever had been tested for HIV, apart from tests that were part of a blood donation. Don't know was considered a valid response to this question. (N = 6,561)

Table 28: Asthma among Adults 2018 Michigan BRFS

	2018 Michig	jan BKFS		2018 Michigan BRFS						
		etime Prevalence ^a		irrent Prevalence ^b						
	%	95% Confidence Interval	%	95% Confidence Interval						
Total	15.9	(15.0-16.9)	11.1	(10.4-12.0)						
Age										
18 - 24	20.0	(17.0-23.5)	13.9	(11.2-17.0)						
25 - 34	18.4	(15.8-21.2)	10.5	(8.5-12.8)						
35 - 44	17.2	(14.7-19.9)	11.7	(9.6-14.1)						
45 - 54	16.6	(14.4-19.0)	12.4	(10.5-14.6)						
55 - 64	14.2	(12.4-16.0)	11.0	(9.5-12.7)						
65 - 74	12.6	(10.9-14.5)	9.2	(7.8-10.9)						
75 +	10.5	(8.3-13.1)	7.5	(5.5-9.9)						
Gender										
Male	13.7	(12.5-15.1)	8.3	(7.3-9.4)						
Female	18.0	(16.7-19.4)	13.9	(12.7-15.1)						
Race/Ethnicity										
White non-Hispanic	15.1	(14.1-16.1)	10.3	(9.4-11.2)						
Black non-Hispanic	21.4	(18.4-24.8)	15.9	(13.3-18.9)						
Other non-Hispanic	15.4	(12.1-19.4)	11.0	(8.2-14.5)						
Hispanic	16.3	(11.6-22.4)	11.8	(7.7-17.6)						
Education										
Less than high school	21.7	(17.6-26.4)	17.2	(13.5-21.7)						
High school graduate	14.3	(12.7-15.9)	10.5	(9.2-12.0)						
Some college	17.2	(15.7-18.9)	12.0	(10.7-13.4)						
College graduate	13.4	(12.2-14.8)	7.9	(7.0-8.9)						
Household Income										
< \$20,000	23.0	(20.0-26.4)	18.2	(15.4-21.3)						
\$20,000 - \$34,999	18.0	(15.7-20.6)	13.6	(11.5-15.9)						
\$35,000 - \$49,999	13.7	(11.3-16.4)	9.0	(7.1-11.2)						
\$50,000 - \$74,999	12.3	(10.3-14.7)	6.9	(5.4-8.7)						
\$75,000 +	13.7	(12.2-15.3)	8.3	(7.2-9.7)						

^a Among all adults, the proportion who reported that they were ever told by a doctor, nurse, or other health care professional that they had asthma. (N = 10,322)

^b Among all adults, the proportion who reported that they still had asthma. (N = 10,322)

Table 29: Asthma among Children 2018 Michigan BRFS

	ZU18 MICHIQ	Jan Bres	I	
		etime Prevalence ^a		ırrent Prevalence ^b
	%	95% Confidence Interval	%	95% Confidence Interval
Total	12.5	(10.9-14.2)	8.6	(7.2-10.2)
Age				
0 - 4	4.6	(2.7-7.7)	4.1	(2.3-7.2)
5 - 9	12.4	(9.3-16.4)	8.9	(6.2-12.6)
10 - 14	16.9	(13.6-20.9)	11.6	(8.8-15.2)
15 - 17	19.2	(15.4-23.6)	10.8	(7.8-14.6)
Gender				
Boy	15.7	(13.3-18.5)	11.3	(9.2-13.9)
Girl	9.2	(7.4-11.5)	5.8	(4.4-7.7)
Race/Ethnicity				
White non-Hispanic	10.8	(9.2-12.8)	6.8	(5.4-8.5)
Black non-Hispanic	18.3	(13.5-24.2)	15.1	(10.7-20.9)
Other non-Hispanic	12.7	(8.4-18.7)	8.3	(5.0-13.4)
Hispanic	10.0	(5.7-16.9)	c	c
Respondent Education				
Less than high school	c	c	c	c
High school graduate	14.9	(11.4-19.4)	11.6	(8.3-15.8)
Some college	15.0	(12.0-18.5)	10.3	(7.8-13.5)
College graduate	9.7	(7.7-12.1)	5.9	(4.4-8.0)
Household Income				
< \$20,000	19.8	(14.2-26.8)	16.0	(10.9-22.7)
\$20,000 - \$34,999	11.4	(7.9-16.3)	8.4	(5.4-12.8)
\$35,000 - \$49,999	16.1	(11.0-23.0)	12.2	(7.6-19.1)
\$50,000 - \$74,999	14.1	(9.9-19.9)	10.7	(7.1-15.7)
\$75,000 +	9.6	(7.6-12.0)	5.2	(3.8-7.2)

^a Estimated proportion of Michigan children aged 0-17 years who were ever told by a doctor, nurse or other health professional that they had asthma, using proxy information from the adult respondent. (N = 2,381).

b Estimated proportion of Michigan children aged 0-17 years who still have asthma, using proxy information from the adult respondent. (N = 2,371)

^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 30: Chronic Obstructive Pulmonary Disease (COPD) 2018 Michigan BRFS Ever Told COPD, Emphysema or Chronic Bronchitis^a 95% Confidence % Interval **Total** 8.6 (8.0-9.3)Age 18 - 24 __c __c 25 - 34 2.4 (1.6-3.5)35 - 44 5.4 (3.9-7.3)45 - 54 (8.1-12.1)10.0 55 - 64 14.4 (12.6-16.5)65 - 75 14.9 (13.0-17.1)75 + 13.2 (10.8-16.0)Gender Male 7.8 (6.9-8.8)Female 9.4 (8.5-10.5)Race/Ethnicity White/Non-Hispanic 8.5 (7.8-9.3)Black/Non-Hispanic 9.5 (7.7-11.8)Other/Non-Hispanic 8.6 (6.1-12.1)Hispanic 6.8 (4.1-11.2)**Education** Less than high school 20.7 (16.9-25.1)High school graduate 9.3 (8.2-10.5)Some college 8.2 (7.3-9.3)College graduate 3.6 (3.0-4.3)**Household Income** < \$20,000 18.6 (16.0-21.5)\$20,000 - \$34,999 (11.1-15.2)13.0 \$35,000 - \$49,999 7.8 (6.2-9.8)\$50,000 - \$74,999 5.5 (4.2-7.1)\$75,000 + 3.0 (2.4-3.8)

^a Among all adults, the proportion who reported ever being told by a doctor that they had chronic obstructive pulmonary disease (COPD), emphysema or chronic bronchitis. (N = 10,263)

^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 31: Arthritis 2018 Michigan BRFS				
Demographic Characteristics	Ever Told Arthritis ^a			
	95% % Confiden Interval			
Total	32.1	(31.0-33.2)		
Age				
18 - 24	5.2	(3.6-7.5)		
25 - 34	11.7	(9.6-14.2)		
35 - 44	21.8	(19.0-24.8)		
45 - 54	31.9	(29.1-34.8)		
55 - 64	47.1	(44.5-49.8)		
65 - 75	55.2	(52.3-58.1)		
75 +	60.1	(56.5-63.6)		
Gender				
Male	27.5	(26.0-29.1)		
Female	36.3	(34.7-38.0)		
Race/Ethnicity				
White/Non-Hispanic	33.2	(32.0-34.5)		
Black/Non-Hispanic	30.8	(27.4-34.4)		
Other/Non-Hispanic	23.8	(19.7-28.5)		
Hispanic	23.5	(18.2-29.8)		
Education				
Less than high school	43.9	(38.8-49.3)		
High school graduate	33.8	(31.7-36.0)		
Some college	32.7	(30.9-34.7)		
College graduate	24.3	(22.8-25.8)		
Household Income				
< \$20,000	46.3	(42.7-50.0)		
\$20,000 - \$34,999	37.7	(34.8-40.7)		
\$35,000 - \$49,999	34.9	(31.6-38.3)		
\$50,000 - \$74,999	31.0	(28.0-34.0)		
\$75,000 +	21.6	(20.0-23.4)		

Among all adults, the proportion who reported ever being told by a doctor that they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia. (N = 10,268)

Table 32:	Cardiovascular D	Disease
20	018 Michigan BRFS	

		Ever Told Heart Attack ^a Had Told Angina or Coronary Heart Disease ^b		Ever Told Stroke ^c		Ever Told Any Cardiovascular Disease ^d		
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Total	5.3	(4.7-5.8)	5.0	(4.5-5.5)	3.4	(3.0-3.8)	9.8	(9.1-10.5)
Age								
18 - 34	e	e	e	e	0.8	(0.4-1.4)	1.7	(1.1-2.5)
35 - 44	1.7	(0.9-3.1)	c	c	e	e	3.3	(2.2-5.1)
45 - 54	4.0	(2.9-5.4)	3.2	(2.2-4.6)	3.5	(2.5-4.9)	8.0	(6.5-9.9)
55 - 64	7.9	(6.5-9.5)	6.9	(5.7-8.4)	3.6	(2.8-4.6)	12.6	(11.0-14.5)
65 - 74	11.0	(9.2-13.1)	11.1	(9.4-13.2)	6.3	(4.9-8.0)	20.5	(18.1-23.1)
75 +	15.2	(12.6-18.3)	16.7	(14.1-19.7)	9.5	(7.6-11.8)	28.9	(25.6-32.4)
Gender								
Male	6.4	(5.6-7.3)	5.8	(5.0-6.6)	3.1	(2.5-3.7)	10.9	(9.9-12.0)
Female	4.1	(3.5-4.8)	4.2	(3.6-4.8)	3.6	(3.1-4.3)	8.7	(7.8-9.7)
Race/Ethnicity								
White non-Hispanic	5.3	(4.7-5.9)	5.2	(4.7-5.8)	3.0	(2.6-3.5)	9.8	(9.1-10.6)
Black non-Hispanic	5.3	(3.9-7.3)	4.5	(3.1-6.4)	5.1	(3.8-6.9)	10.4	(8.4-12.9)
Other non-Hispanic	5.6	(3.5-9.0)	3.8	(2.3-6.2)	e	e	8.5	(5.9-12.1)
Hispanic	e	e	e	e	e	e	7.8	(4.8-12.7)
Education								
< High school	9.7	(7.0-13.2)	8.0	(5.6-11.4)	7.3	(5.2-10.2)	17.5	(13.9-21.7)
High school graduate	6.0	(5.1-7.1)	4.8	(4.0-5.7)	3.7	(3.0-4.6)	10.5	(9.3-11.9)
Some college	5.1	(4.3-6.0)	5.0	(4.2-5.9)	2.9	(2.4-3.6)	9.3	(8.3-10.5)
College graduate	3.0	(2.5-3.6)	3.9	(3.3-4.6)	2.0	(1.6-2.5)	6.5	(5.8-7.4)
Household Income								
< \$20,000	9.7	(7.6-12.3)	8.2	(6.3-10.6)	6.6	(5.1-8.6)	17.1	(14.4-20.2)
\$20,000 - \$34,999	7.5	(6.1-9.1)	5.9	(4.8-7.2)	5.1	(4.0-6.5)	13.4	(11.5-15.4)
\$35,000 - \$49,999	5.9	(4.5-7.7)	5.7	(4.4-7.3)	2.4	(1.7-3.4)	10.3	(8.6-12.4)
\$50,000 - \$74,999	5.0	(3.8-6.6)	5.2	(3.9-6.9)	2.4	(1.5-3.8)	8.6	(6.9-10.7)
\$75,000 +	2.5	(1.9-3.2)	3.0	(2.4-3.8)	1.2	(0.8-1.6)	4.9	(4.1-5.8)

Among all adults, the proportion who had ever been told by a doctor that...

^a they had a heart attack or myocardial infarction (N = 10,254);

b they had angina or coronary heart disease (N = 10,240);

c they had a stroke. (N = 10,294)

d they had a heart attack, coronary heart disease or a stroke. (N = 10,198)

e Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 33: Cancer 2018 Michigan BRFS

		2010 Wilchige			1	
	Ever Tolo	Ever Told Skin Cancer ^a Ever Told Any Other Types of Cancer ^b		Ever Told Cancer ^c		
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Total	6.4	(5.9-6.9)	7.7	(7.1-8.3)	12.8	(12.1-13.6)
Age						
18 - 34	d	d	1.0	(0.6-1.7)	1.3	(0.8-2.1)
35 - 44	1.7	(1.1-2.7)	2.9	(2.0-4.3)	4.6	(3.4-6.2)
45 - 54	4.3	(3.3-5.6)	5.0	(3.9-6.3)	8.8	(7.3-10.5)
55 - 64	8.8	(7.4-10.4)	11.0	(9.5-12.7)	18.6	(16.7-20.8)
65 - 74	12.1	(10.5-13.9)	16.6	(14.7-18.8)	25.5	(23.2-28.0)
75 +	24.8	(21.8-28.2)	21.5	(18.7-24.6)	40.0	(36.5-43.6)
Gender						
Male	6.0	(5.2-6.7)	6.6	(5.9-7.5)	11.3	(10.4-12.4)
Female	6.8	(6.1-7.6)	8.7	(7.9-9.6)	14.2	(13.1-15.3)
Race/Ethnicity						
White non-Hispanic	8.0	(7.4-8.7)	8.5	(7.8-9.2)	14.9	(14.0-15.8)
Black non-Hispanic	d	d	5.8	(4.3-7.7)	6.1	(4.5-8.0)
Other non-Hispanic	d	d	3.9	(2.5-5.9)	5.3	(3.6-7.7)
Hispanic	d	d	4.1	(2.4-6.9)	5.0	(3.1-8.0)
Education						
Less than high school	4.6	(2.9-7.4)	9.2	(6.8-12.3)	13.0	(10.0-16.6)
High school graduate	5.9	(5.0-6.9)	7.3	(6.3-8.4)	12.3	(11.0-13.7)
Some college	6.1	(5.3-7.1)	7.5	(6.6-8.6)	12.5	(11.3-13.8)
College graduate	8.1	(7.2-9.0)	7.7	(6.9-8.6)	13.8	(12.7-15.0)
Household Income						
< \$20,000	4.7	(3.4-6.4)	9.2	(7.5-11.2)	12.9	(10.8-15.3)
\$20,000 - \$34,999	5.9	(4.8-7.2)	8.8	(7.3-10.5)	13.4	(11.6-15.4)
\$35,000 - \$49,999	7.6	(6.1-9.4)	8.7	(7.1-10.6)	14.7	(12.6-17.0)
\$50,000 - \$74,999	6.7	(5.3-8.4)	8.4	(6.8-10.5)	13.4	(11.4-15.8)
\$75,000 +	6.6	(5.7-7.6)	5.6	(4.8-6.5)	11.0	(9.8-12.2)

^a Among all adults, the proportion who reported ever being told by a doctor that they had skin cancer. (N = 10,301)

^b Among all adults, the proportion who reported ever being told by a doctor that they had a form of cancer other than skin cancer. (N = 10,300)

Among all adults, the proportion who reported ever being told by a doctor that they had skin cancer or any other type of cancer. (N = 10,287)

d Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 34: Diabetes 2018 Michigan BRFS				
	Ever To	Ever Told Diabetes ^a		
	95% Confidence Interval			
Total	11.7	(10.9-12.5)		
Age				
18 – 24	2.1	(1.2-3.8)		
25 – 34	2.5	(1.6-4.0)		
35 – 44	4.8	(3.5-6.5)		
45 – 54	11.2	(9.3-13.5)		
55 – 64	18.6	(16.5-20.8)		
65 – 74	22.3	(19.8-24.9)		
75 +	24.9	(21.8-28.4)		
Gender				
Male	12.3	(11.2-13.6)		
Female	11.0	(10.0-12.1)		
Race/Ethnicity				
White non-Hispanic	11.3	(10.5-12.2)		
Black non-Hispanic	15.3	(12.9-18.2)		
Other non-Hispanic	9.8	(7.1-13.4)		
Hispanic	11.0	(7.4-15.8)		
Education				
Less than high school	19.3	(15.5-23.7)		
High school graduate	13.0	(11.6-14.6)		
Some college	11.7	(10.5-13.0)		
College graduate	7.0	(6.2-7.9)		
Household Income				
< \$20,000	18.0	(15.4-21.0)		
\$20,000 - \$34,999	13.9	(11.9-16.2)		
\$35,000 - \$49,999	13.2	(11.0-15.8)		
\$50,000 - \$74,999	10.0	(8.2-12.2)		
\$75,000 +	7.2	(6.2-8.4)		

^a Among all adults, the proportion who reported that they were ever told by a doctor that they had diabetes. Adults told they have prediabetes and women who had diabetes only during pregnancy were classified as not having been diagnosed. (N = 10,306)

Table 35: Kidney Disease 2018 Michigan BRFS				
	Ever Told Kidney Disease ^a			
	%	95% Confidence Interval		
Total	3.5	(3.1-4.0)		
Age				
18 – 24	 b	b		
25 – 34	b	b		
35 – 44	1.0	(0.6-1.9)		
45 – 54	3.1	(2.2-4.3)		
55 – 64	4.9	(3.7-6.4)		
65 – 74	6.3	(5.0-7.9)		
75 +	9.3	(7.4-11.7)		
Gender				
Male	3.4	(2.8-4.1)		
Female	3.6	(3.0-4.2)		
Race/Ethnicity				
White non-Hispanic	3.5	(3.0-4.0)		
Black non-Hispanic	5.0	(3.6-6.9)		
Other non-Hispanic	b	b		
Hispanic	 b	b		
Education				
Less than high school	5.2	(3.2-8.1)		
High school graduate	3.3	(2.6-4.1)		
Some college	3.8	(3.1-4.6)		
College graduate	2.8	(2.3-3.4)		
Household Income				
< \$20,000	5.4	(4.1-7.0)		
\$20,000 - \$34,999	4.8	(3.7-6.3)		
\$35,000 - \$49,999	3.9	(2.7-5.5)		
\$50,000 - \$74,999	2.5	(1.6-3.8)		
\$75,000 +	2.5	(1.9-3.2)		

^a Among all adults, the proportion who reported ever being told by a doctor that they had kidney disease. (N = 10,297)

^b Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 36: Depression 2018 Michigan BRFS				
	Ever Told Depression ^a			
	%	95% Confidence Interval		
Total	23.2	(22.1-24.2)		
Age				
18 – 24	28.0	(24.5-31.9)		
25 – 34	27.0	(24.0-30.2)		
35 – 44	23.2	(20.5-26.2)		
45 – 54	24.2	(21.8-26.9)		
55 – 64	24.4	(22.1-26.7)		
65 – 74	19.5	(17.4-21.8)		
75 +	12.4	(10.2-15.1)		
Gender				
Male	17.5	(16.2-19.0)		
Female	28.5	(27.0-30.1)		
Race/Ethnicity				
White non-Hispanic	23.3	(22.1-24.5)		
Black non-Hispanic	20.8	(17.9-24.0)		
Other non-Hispanic	22.9	(18.8-27.5)		
Hispanic	29.1	(23.1-36.0)		
Education				
Less than high school	34.7	(29.8-39.9)		
High school graduate	23.2	(21.3-25.2)		
Some college	23.7	(22.0-25.5)		
College graduate	17.9	(16.6-19.4)		
Household Income				
< \$20,000	41.6	(38.1-45.2)		
\$20,000 - \$34,999	27.8	(25.1-30.7)		
\$35,000 - \$49,999	22.1	(19.2-25.3)		
\$50,000 - \$74,999	18.7	(16.4-21.3)		
\$75,000 +	15.4	(13.8-17.1)		

^a Among all adults, the proportion who reported ever being told by a doctor that they had a depressive disorder including depression, major depression, dysthymia, or minor depression. (N = 10,269)

Table 37: Falls Among Adults Aged 45 Years and Older 2018 Michigan BRFS					
		During 12 Months ^a	Injured From a Fall During the Past 12 Months ^b		
	%	95% Confidence Interval	%	95% Confidence Interval	
Total	28.6	(27.3-30.0)	11.9	(11.0-13.0)	
Age					
45 - 54	25.9	(23.4-28.7)	12.7	(10.7-15.0)	
55 - 64	30.3	(27.8-32.8)	13.7	(11.8-15.7)	
65 - 74	29.0	(26.4-31.7)	9.4	(7.9-11.2)	
75 +	29.9	(26.7-33.3)	11.3	(9.1-13.9)	
Gender					
Male	26.1	(24.2-28.1)	9.4	(8.2-10.9)	
Female	30.9	(29.0-32.8)	14.2	(12.7-15.7)	
Race/Ethnicity					
White non-Hispanic	28.4	(27.0-29.9)	11.2	(10.2-12.3)	
Black non-Hispanic	32.6	(28.0-37.5)	16.0	(12.7-20.0)	
Other non-Hispanic	24.4	(18.0-32.2)	17.2	(11.5-25.0)	
Hispanic	29.3	(19.8-41.1)	16.6	(9.2-28.2)	
Respondent Education					
Less than high school	37.4	(31.1-44.1)	22.9	(17.5-29.4)	
High school graduate	29.2	(26.6-31.9)	10.8	(9.2-12.6)	
Some college	29.6	(27.3-32.0)	13.1	(11.5-14.9)	
College graduate	23.7	(21.9-25.6)	7.9	(6.8-9.2)	
Household Income					
< \$20,000	42.0	(37.7-46.6)	25.3	(21.5-29.4)	
\$20,000 - \$34,999	31.9	(28.5-35.5)	14.3	(11.8-17.1)	
\$35,000 - \$49,999	29.8	(26.0-33.8)	10.2	(8.0-13.0)	
\$50,000 - \$74,999	28.8	(25.3-32.6)	9.5	(7.4-12.1)	
\$75,000 +	20.8	(18.8-23.0)	7.1	(5.8-8.5)	

^a Among adults aged 45 years and older, the proportion who reported to have unintentionally come to rest on the ground or another lower level during the past 12 months. (N = 6,755)

^b Among adults aged 45 years and older, the proportion who reported to have been injured due to a fall during the past 12 months. (N = 6,741)